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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,339	05/11/2001	Dan Kikinis	007287.00040	8678
22907 7590 06/04/2009 BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER VAN HANDEL, MICHAEL P	
			ART UNIT	PAPER NUMBER
			2424	
			MAIL DATE	DELIVERY MODE
			06/04/2009 PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/854,339

Applicant(s)

KIKINIS ET AL.

Examiner

MICHAEL VAN HANDEL

Art Unit

2424

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8-10, 12-14, 16, 19-21, 23-25, 27, 29-31, 33 and 35-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8-10, 12-14, 16, 19-21, 23-25, 27, 29-31, 33, 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/27/2009 has been entered.

Response to Amendment

1. This action is responsive to an Amendment filed 3/27/2009. Claims **1-3, 5, 8-10, 12-14, 16, 19-21, 23-25, 27, 29-31, 33, 35-40** are pending. Claims **1, 12, 23** are amended. Claims **4, 6, 7, 11, 15, 17, 18, 22, 26, 28, 32, 34** are canceled.

Response to Arguments

1. Applicant's arguments regarding claims **1, 12, 23**, and **35-40**, filed 3/27/2009, have been fully considered, but they are not persuasive.

Regarding claims **1, 12**, and **23**, the applicant argues that Rowe et al. does not teach virtual worlds that are 3-D. The examiner respectfully disagrees. As noted in the Office Action mailed 6/26/2008, Rowe et al. discloses storing programming information within one or more databases and retrieving the information to support the display of the selected programming information by the display system. For the preferred schedule display 50, each of the displays

52, 54, and 56 uses three-dimensional shading to indicate that a tile is scrolling off beyond the visible area of its display (col. 8, l. 34-37). A subscriber selects programming information by first choosing the general category for the desired programming information. By moving the focus frame 60 to the category display 52, the subscriber can select a category of programming information by scrolling the category display 52 until the category tile 62 representing the desired category appears in the viewing panel 58. In turn, this “resets” the subcategory display 54 to display subcategory tiles 64 representing subcategories associated with the selected category (col. 9, l. 46-61 & Figs. 1-4). The examiner interprets this reset to correspond to a virtual world. That is, the display in Figures 2-8 corresponds to a Sports virtual world. This meets the limitation of “providing a plurality of 3-D virtual worlds,” as currently claimed. Rowe et al. further discloses that the program display 56 responds to the appearance of a selected subcategory tile 64 within the viewing panel 58 by displaying one or more program tiles 66 representing programs associated with the selected subcategory if such programs are available for the selected subcategory (col. 9, l. 61-67 & Figs. 1-4). The examiner also interprets the selection of each subcategory to correspond to a virtual world. That is, the display in Figures 2-8 corresponds to a Basketball virtual world. This also meets the limitation of “providing a plurality of 3-D virtual worlds,” as currently claimed. Rowe et al. still further discloses that the information in program summary panel 90 is preferably updated as the subscriber changes the settings of the schedule display 50 by scrolling one of the category display 52, subcategory display 54, or program display 56. This information update occurs in response to a “new” tile appearing within the viewing panel 58 (col. 14, l. 21-31). Thus, the scrolling of the program tiles also meets the limitation of “providing a plurality of 3-D virtual worlds,” as currently claimed.

Further regarding claims **1**, **12**, and **23**, the applicant argues that Rowe et al. does not teach that the EPG objects include world descriptions that describe layouts and elements for the virtual worlds. The examiner respectfully disagrees. Rowe et al. discloses that programming information is stored as a set of tiles, including category tiles, subcategory tiles, and program tiles (col. 3, l. 23-38). Rowe et al. also discloses utilizing text-based, graphical, audio, or video information (col. 4, l. 8-16; col. 14, l. 33-45; & col. 15, l. 1-30) in the EPG. The examiner interprets all of this information to be “EPG objects,” as currently claimed. All of this information is linked together in a database that includes at least four tables, namely (1) a table containing records for each television episode, (2) a table containing records for each television series, (3) a table containing records of program categories, and (4) a table containing records of program subcategories. Each television program is linked to its parent television series and each television series is associated with categories and subcategories which define the characteristics of the series (col. 5, l. 36-50). As such, the examiner notes that each of the EPG objects contains information linking the objects together to form a structure that operates as illustrated in Figures 1-4. Thus, the examiner interprets these objects as including “world descriptions that describe layouts and elements for the virtual worlds,” as currently claimed.

Regarding claims **35** and **38**, the applicant argues that Rowe et al. does not teach that the 3-D EPG includes a presentation of a virtual world selected on the basis of a user’s age. The examiner respectfully disagrees. Applicant specifically argues that Rowe et al. merely discloses different categories and sub-categories of programming information that can be displayed and how these categories and sub-categories may be selected to limit the display to just programs in the particular category. As noted above, Rowe et al. discloses changing the EPG display in

response to selection of a category tile, subcategory tile, or program tile to display information corresponding to the selection. The examiner interprets these display changes to be different “virtual worlds” corresponding to a particular category, subcategory, and/or program. Further regarding claims 35 and 38, the applicant argues that Rowe et al. does not contain a discussion of age, just the mention of “children’s programs.” Rowe et al. discloses a “Children” category of programming information (col. 7, l. 28-30 & col. 11, l. 23-40). Since the “Children” category’s target audience is children, the examiner maintains that Rowe et al. teaches “presentation of a virtual world selected on the basis of a user’s age,” as currently claimed.

Regarding claims **36** and **39**, the applicant argues that Rowe et al. does not teach that the 3-D EPG includes a presentation of a virtual world customized by user preferences. The examiner respectfully disagrees. The applicant specifically argues that the cited sections of Rowe et al. merely disclose programming information that is presented based on user preferences. As noted above, Rowe et al. discloses changing the EPG display in response to selection of a category tile, subcategory tile, or program tile to display information corresponding to the selection. The examiner interprets these display changes to be different “virtual worlds” corresponding to a particular category, subcategory, and/or program. As such, the examiner maintains that Rowe et al. teaches “a presentation of a virtual world customized by user preferences,” as currently claimed.

Regarding claims **37** and **40**, the applicant argues that Rowe et al. does not teach that the 3-D EPG includes a presentation of a virtual world selected by a programmer. The examiner respectfully disagrees. The applicant specifically argues that the cited section of Rowe et al. describes program distribution through communications links and distribution at a headend and

that this is not related to what is claimed in these claims. Rowe et al. discloses that a communications link 26 allows a program distributor or supplier to transmit programming information for storage by the memory storage device 12 and eventual distribution to subscribers via the headend processor 14 (col. 6, l. 2-8). This program information is used to update the schedule display (col. 7, l. 13-15). As such, the examiner interprets the program distributor or supplier to be a “programmer,” as currently claimed. Thus, the examiner maintains that Rowe et al. teaches “a presentation of a virtual world selected by a programmer,” as currently claimed.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-3, 5, 8-10, 12-14, 16, 19-21, 23-25, 27, 29-31, 33, 35-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe et al. in view of Boylan, III et al.

Referring to claims **1, 12, and 23**, Rowe et al. discloses a system/method, comprising:

- a first unit 32 configured to generate an interactive three-dimensional (3-D) electronic programming guide (EPG), the 3-D EPG including a presentation of a virtual world (col. 6, l. 50-59; col. 8, l. 34-37; col. 14, l. 8-67; col. 15, l. 1-67; col. 16, l. 1-22; & Figs. 1, 2);
- a database storing a plurality of EPG objects (col. 3, l. 23-38; col. 5, l. 23-50; col. 13, l. 48-56; & col. 14, l. 33-55), the EPG objects comprising world descriptions that

- describe layouts and elements for providing a plurality of 3-D virtual worlds (col. 14, l. 8-67; col. 15, l. 1-67; col. 16, l. 1-22; & Figs. 2-8) presentable in the EPG, and including 3-D images (col. 5, l. 36-42; col. 7, l. 62-67; & col. 8, l. 1, 21-37), alphanumeric text (col. 4, l. 8-19) and video data (col. 14, l. 33-55); and
- a user interface (UI) configured to allow a user to interact with the objects (col. 7, l. 1-15 & col. 9, l. 29-46).

Rowe et al. does not disclose that the non-EPG objects comprise interactive localized content and electronic commerce (e-commerce) objects and a user interface (UI) for interaction with the localized interactive content and e-commerce objects. Boylan, III et al. discloses replacing global advertisements with local advertisements in a program guide (p. 1, paragraph 11) and allowing a user to interact with the advertisements (p. 4, paragraph 54). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to replace the preview section of Rowe et al. with interactive local advertisements, such as that taught by Boylan, III et al. in order to provide an interactive television program guide system in which users may be provided with local program guide advertising (p. 1, paragraph 7).

Referring to claims **2**, **14**, and **24**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1, 12, and 23, respectively, wherein the system comprises a set-top box (Rowe et al. col. 6, l. 50), a television (Rowe et al. col. 2, l. 43), or a VCR.

Referring to claims **3** and **25**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1 and 24, respectively, wherein the system includes a plurality of drivers, one of the drivers communicating with a separate unit to replenish programming information (Rowe et al. col. 7, l. 1-15).

Referring to claims **8, 19, 29, and 31**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1, 12, 27, and 30, wherein the EPG objects comprise a first class of objects (summary panel 90) providing a plurality of virtual worlds included in the 3-D EPG (the examiner notes that the information shown in summary panel 90 corresponds to the selected tile appearing within the viewing panel 58)(Rowe et al. col. 14, l. 8-55 & col. 15, l. 1-30).

Referring to claims **5, 16, and 27**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1, 12, and 23, respectively, wherein the EPG objects comprise a second set of objects (program tiles) that includes at least one of a schedule times, channel identification, or title, corresponding to a program (Rowe et al. col. 4, l. 8-11).

NOTE: The USPTO considers the applicant's "at least one of" language to be anticipated by any reference containing any of the subsequent corresponding elements.

Referring to claims **9, 20, and 30**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 8, 19, and 29, respectively, wherein a subset of the virtual world is displayed as a matrix of rectangular boxes containing current program information (the examiner notes that program summary panel forms a matrix of rectangular boxes containing current program information (preview section 92 and text description section 94)(Rowe et al. col. 14, l. 33-42 & Figs. 2-4).

Referring to claims **10, 21, and 33**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1, 20, and 27, respectively. Rowe et al. further discloses Tiger video files for display in the preview section 92. Each Tiger video file is stored at the location of the headend processor and distributed in response to a request output by the

subscriber's set-top converter 32 (col. 15, l. 1-13). Rowe et al. does not disclose uploading localized content in real time. Boylan, III et al. discloses a computer 94 that retrieves local advertisements from advertising database 57 as needed for transmission to user television equipment 54 (p. 5, paragraph 68). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the combination of Rowe et al. and Boylan, III et al. to include distributing local advertisements to users as needed, such as that taught by Boylan, III et al. in order to present current information to a user.

Referring to claim **13**, the combination of Rowe et al. and Boylan, III et al. teaches the computer-implemented method of claim 12, wherein the EPG objects comprise a plurality of objects associated with current programming events (col. 5, l. 10-12).

Referring to claims **35** and **38**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1 and 12, respectively, wherein the 3-D EPG includes a presentation of a virtual world selected on the basis of a user's age (Rowe et al. col. 7, l. 28-30 & col. 11, l. 23-40).

Referring to claims **36** and **39**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1 and 12, respectively, wherein the 3-D EPG includes a presentation of a virtual world customized by user preferences (col. 2, l. 44-47 & col. 14, l. 21-32).

Referring to claims **37** and **40**, the combination of Rowe et al. and Boylan, III et al. teaches the system/method of claims 1 and 12, respectively, wherein the 3-D EPG includes a presentation of a virtual world selected by a programmer (col. 6, l. 2-8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Kelley/
Supervisory Patent Examiner, Art Unit
2424

MVH

